NTIA Presentation for Executive Council for Multifunction Phased Array Radar: Spectrum Planning

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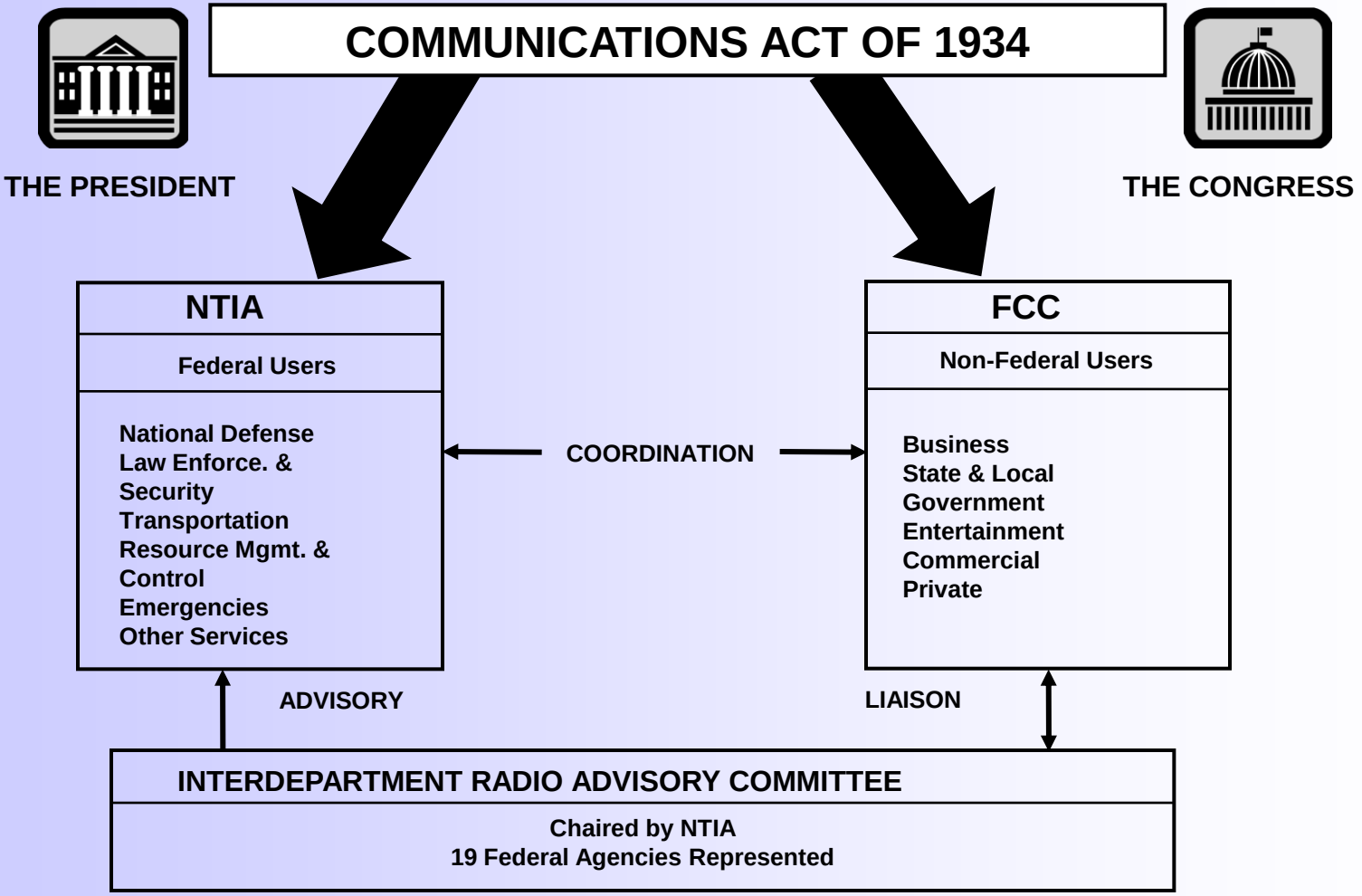
Overview

- NTIA/FCC
- Spectrum State of Play
  - FCC NATIONAL BROADBAND PLAN
  - NTIA
  - CONGRESS
- RADAR BANDS
- RADAR USERS: TO DO
- ISSUES

The law provides FCC and NTIA authority over users

National Spectrum Management



Not over spectrum

FCC National Broadband Plan Recommendations (EXAMPLES)

- Recommendation 5.5: **Congress should consider building upon the success of the Commercial Spectrum Enhancement Act (CSEA) to fund additional approaches to facilitate incumbent relocation.**
- Recommendation 5.7: **The FCC should evaluate the effectiveness of its secondary markets policies and rules to promote access to unused and underutilized spectrum.**
- Recommendation 5.8: **The FCC should make 500 megahertz newly available for broadband use within the next 10 years, of which 300 megahertz between 225 MHz and 3.7 GHz should be made newly available for mobile use within five years.**

FCC NBP (con't)

- Recommendation 5.8.3: **The FCC should make up to 60 megahertz available by auctioning Advanced Wireless**
- **Services (AWS) bands, including, if possible, 20 megahertz from federal allocations.**
- Recommendation 5.11: **The FCC, within the next 10 years, should free up a new, contiguous nationwide band for unlicensed use.**
- Recommendation 5.15: **The FCC and NTIA should develop a joint roadmap to identify additional candidate federal and non-federal spectrum that can be made accessible for both mobile and fixed wireless broadband use, on an exclusive, shared, licensed and/or unlicensed basis.**

http://download.broadband.gov/plan/national-broadband-plan.pdf

NTIA

NTIA's FY2011 budget, Exhibit 3, and spectrum issues
(http://www.ntia.doc.gov/budget/ExecutiveSummary_FY2011.pdf)
read as follows:

- In addition, NTIA will support the Administration's efforts to foster new wireless broadband technologies by making new spectrum available. Specifically, NTIA will collaborate with the FCC to develop a plan to make available 500MHz of spectrum suitable for both mobile and fixed wireless broadband use over the next ten years. The plan will focus on making spectrum available for exclusive use by commercial broadband providers or technologies, or for dynamic, shared access by commercial and government users.

CONGRESS

- Radio Spectrum Inventory Act, S. 649
- Radio Spectrum Inventory Act, HR 3125

Both require an inventory of radio spectrum bands managed by the National Telecommunications and Information Administration and the Federal Communications Commission.

RADAR BANDS (Examples < 20 GHz)

- 420-450 MHz
- 1215-1390 MHz
- 2700-2900 MHz
- 2900-3100 MHz
- 3100-3650 MHz
- 5250-5850(5925) MHz
- 8500-10550 MHz
- 13250-14000 MHz
- 15400-17300 MHz

RADAR BANDS TRAITS

- Large pieces of contiguous spectrum
- Not much worldwide support in many cases to protect
- In many cases all frequencies are not used at all locations
- Pulsed signals
- Have large EIRPs so are not easily interfered with (shown not to be true in many cases)

RADAR USERS: TO DO

- KEEP INFORMED
- NEED TO WORK WITH YOUR SPECTRUM COMMUNITY (E.G., IRAC REPRESETNATIVES) TO MAKE SURE THAT DECISION MAKERS HAVE THE NECESSARY INFORMATION WHEN MAKING DECISIONS

IRAC Representatives

- http://www.ntia.doc.gov/osmhome/IRAC/I37412_1_IRAC_Membership%20List_20090923.pdf
- Spectrum work needs to be done through agency IRAC Representatives

Issues

- Spectrum Requirements
  - Competition
    - RNSS, e.g., GPS
    - Broadband, e.g., mobile communications
- Sharing
  - Design: Transmitters and Receivers
  - Planning
- Work with your spectrum managers